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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/361,626	07/27/1999	FELIX MOK	PM-262743	5745

7590 06/25/2002

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EXAMINER

CINTINS, IVARS C

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 06/25/2002

20

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/361,626

Applicant(s)
Mok et al.

Examiner
Ivars Cintins

Art Unit
1724



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 1, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9, and 10 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-7, 9 and 10 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. The limitation that the brine is treated with a magnesium salt "at a Mg concentration ... less than 5 ppm" (claim 1, lines 6-7) does not appear to be supported by the disclosure originally filed, and hence constitutes **new matter**. Similarly, the limitation that the brine is treated with sufficient alkali metal hydroxide to provide an excess alkalinity concentration between 0.1 - 0.3 g/L" (claim 1, lines 8-9) also does not appear to be supported by the disclosure originally filed, and hence also constitutes **new matter**. The Twardowski declaration submitted May 1, 2002 alleges "that there is a critical relationship in the Mg to Al molar ratio, Mg concentration (less than 5 ppm), and use of alkali metal hydroxide to provide the excess alkalinity recited

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in claim 1 (0.1 to 0.3 g/L) if the most effective aluminum removal is to be obtained" (see Paragraph 11). However, the specification discloses (see page 5, lines 23-26) Mg concentrations of 0.5 to 10 ppm and the use of alkali metal hydroxide to provide an excess alkalinity of 0.1 to 0.5 g/L; and therefore, this newly submitted Twardowski declaration is deemed to be evidence that Applicant was not in possession of the invention now claimed (i.e. Mg concentration less than 5 ppm, and excess alkalinity of 0.1 to 0.3 g/L) at the time the application was filed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 9 and 10 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Nagy. As pointed out in the previous Office Action, Nagy discloses a process for removing trace amounts of aluminum from a sodium chloride brine by treating the brine with magnesium chloride to produce a magnesium concentration of at least about 5 ppm in the brine, and

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subsequently adding sodium hydroxide to this brine to provide an alkalinity concentration of 0.15 g/L in this brine, thereby forming a magnesium aluminum hydroxide precipitate. Accordingly, this reference discloses the claimed invention with the exception of the recited magnesium to aluminum molar ratio, and the exact magnesium concentration in the brine (i.e. less than 5 ppm). However, the exact magnesium to aluminum molar ratio in the reference process is not seen to materially affect the overall results of this process, or to produce any new and unexpected result; and is therefore deemed to be an obvious matter of choice, which is insufficient to patentably distinguish the claims. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a brine having a magnesium concentration slightly lower than that disclosed (e.g. 4.99 ppm) in the reference, since such a slightly lower magnesium concentration is also not seen to materially affect the overall results of the reference process, or to produce any new and unexpected result; and is therefore also deemed to be an obvious matter of choice, which is insufficient to patentably distinguish the claims.

Applicant's arguments filed May 1, 2002 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant requests reconsideration in view of the

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newly presented Twardowski declaration. It is pointed out, however, that while this declaration does appear to demonstrate new and unexpected results for certain combinations of Mg to Al molar ratio, Mg concentration and excess alkalinity, it is not deemed to be persuasive of patentability for claims 1-7, 9 and 10 because the specific conditions (e.g. 0.5 ppm, 1.0 ppm or 2.0 ppm Mg concentration) necessary to produce these results have not been recited in any of these claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (703) 308-3840. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

The fax phone numbers for this art unit are: (703) 872-9311 for "Official" faxes after Final Rejection; (703) 872-9310 for all other "Official" faxes; and (703) 872-9492 for "Draft" and other "Unofficial" faxes.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Ivars C. Cintins
Ivars C. Cintins
Primary Examiner
Art Unit 1724

I. Cintins
June 21, 2002